

Solid Waste Division Business Plan

- Objective: Develop a plan that is sustainable from an environmental and a financial perspective and meets the current and future needs of our customers and stakeholders
- This plan is for the division – it must support the comprehensive solid waste management plan, but it is separate
- 10-year Business Plan provides a strategic roadmap for achieving our desired outcomes and ultimately our vision:

“We achieve zero waste of resources and enhance the environment through collaboration and commitment.”



King County

Department of
Natural Resources and Parks
Solid Waste Division

Solid Waste Division Business Plan

- Focused on three product families – waste prevention, resource recovery, and waste disposal
- The plan provides the following:
 - Identifies desired outcomes
 - Identifies problems and gaps related to achieving outcomes
 - Identifies and evaluates strategies to address those problems and gaps
 - Identifies resources, legislation and/or policies, etc. that would be needed to implement a strategy
 - Presents a plan to put chosen strategies into action, including a detailed 2-year implementation plan that will support the 2017/18 budget request
 - Clearly illustrates the value that will be realized
 - Identifies measures that will track progress toward achieving desired outcomes

Long-term Goals

Zero waste	Achieve Zero Waste of Resources by 2030 by targeting areas of the waste stream that have the greatest potential for diversion and recovery.
Disposal	Provide environmentally sound, cost-effective waste disposal capacity to the region through 2040.
Carbon neutral	Achieve carbon neutral operations by 2025.
Energy recovery	Increase energy recovery from select materials including organics, mixed plastics, and the non-recyclable portion of the waste stream.

Problem Statement 1:

Interlocal agreements with cities obligate the division to provide disposal services through 2040, but the current plan does not have capacity to meet this obligation.



King County

Department of
Natural Resources and Parks
Solid Waste Division

Problem Statement 2:

About 78 percent of materials being disposed have value or could have value that is not being utilized.



Problem Statement 3:

The division is committed to achieve carbon-neutral operations by 2025; the 2015 greenhouse gas emissions inventory for the division is approximately 39,000 MtCO₂e.

Alternatives to Evaluate

Unincorporated area model

Implement collection standards in the unincorporated area including:

- require all single-family residential garbage customers to have recycling and organics service
- every-other-week garbage collection
- education and tagging of garbage containing recyclables and organics
- phase in mandatory separation requirements

Enforcement program

Develop a program to enforce mandatory separation requirements for single-family residential garbage customers in the unincorporated area.

Includes educational tagging followed by enforcement of separation requirements and fines.



King County

Department of
Natural Resources and Parks
Solid Waste Division

Alternatives to Evaluate

Increase regional cooperation in waste prevention & recycling efforts

Provide grants, incentives, support and assistance to cities that support our waste prevention and recycling goals.

Legislative support

Increase interaction with state government and law makers to support legislation that encourages policies and programs that support zero waste, recycling, and environmental goals, e.g., product stewardship.

Increase presence in state and national groups that support waste prevention and recycling.

Market development

Increase efforts to develop local markets for recyclable materials with a focus on target materials.

Ongoing evaluation of local, national, and global markets.



King County

Department of
Natural Resources and Parks
Solid Waste Division

Alternatives to Evaluate

Transfer Station recycling/ resource recovery

Evaluate a range of strategies such as providing additional bins for customers to place recycling, floor sorting, and mechanical sorting and pick lines, and expanding the range of materials recovered.

Promote transfer station recycling and educate customers.

Ban disposal from self-haulers of materials with recycling options available at the station.

Mixed waste processing/recovery

Supplement waste prevention and recycling with additional processing to recover recyclables and organics from garbage at a mixed waste processing facility.

Consider options for public-private and/or regional partnership.

Alternatives to Evaluate

Research & development program

Establish an ongoing program to engage in opportunities that encourage development of alternative waste management technologies. Includes partnering with research institutes such as the University of Washington.

Support current projects:

- evaluate options for developing anaerobic digestion
- solicit proposals that explore interest and ideas for managing a portion of the waste stream using alternative technologies

Community based sustainability partnerships

Develop a program that assists community groups interested in resource recovery projects and waste prevention.

Initially focus on a partnership with Zero Waste Vashon to establish community-scale management of food and yard waste.

Explore other strategies, such as community support for rejecting non-recyclable packaging and products.



King County

Department of
Natural Resources and Parks
Solid Waste Division

Alternatives to Evaluate

Cedar Hills Development

Evaluate options for increasing capacity at Cedar Hills that could be implemented individually or in combination.

- a) New area development: Design and construct new disposal areas to provide capacity at Cedar Hills through 2040.
- b) Redevelop unlined refuse areas: Explore using existing unlined refuse areas to increase capacity at Cedar Hills and reduce risk.
- c) Increase landfill height: Increase the height of existing and new disposal areas to above 800 feet.

Alternatives to Cedar Hills

Explore alternatives to increasing capacity at Cedar Hills.

- Waste export to an out-of-county landfill
- Waste-to-energy

Alternatives to Evaluate

Solar power

Install a utility grade solar power array at Cedar Hills.

Explore different technologies, timing, and power use.

Consider a community solar project to take advantage of any available incentives and provide a benefit to customers.

Renewable fuel

Develop a program to use renewable fuel in fleet vehicles and equipment.

Explore different types of fuel including costs and suitability, equipment upgrades, and attrition based replacement to avoid conversion costs.

Evaluation Criteria

Political

- Public and political understanding and acceptance
- Consistency with regulations, county code, state and federal law
- Risk

Economic

- Capital cost
- Operations and maintenance cost
- Revenue
- Economic risk

Environmental

- Effect on waste prevention and recycling
- Effect on resource consumption and environmental resources
- Consistency with Strategic Climate Action Plan

Social

- Equity and social justice
- Effect on employees
- Service to customers

Technological

- Complexity of implementation
- Complexity of system and facility operation
- Operational risks
- Flexibility and adaptability

Effectiveness in meeting goals

Your Thoughts

- Are there alternatives that you are pleased to see included? Why?
- Alternatives that concern you? Why?
- What are you most interested in learning more about?
- Anything we should be sure consider as we evaluate alternatives?



King County

Department of
Natural Resources and Parks
Solid Waste Division